

January 18, 2017

Mr. Bryce Bird, Director Utah Department of Environmental Quality Division of Air Quality 195 North 1950 West P.O. Box 144820 Salt Lake City, UT 84114-4820

And

Director, USEPA Region VIII 8 ENF-AT 1595 Wynkoop St. Denver, CO 80202 – 1129

RE: Semiannual Compliance Report 40 CFR 63 SubPart UUUUU, Huntington Power Plant (Title V Permit #1501001004)

Dear Mr. Bird:

Huntington Power Plant's Title V Permit Conditions II.B.2.g.3 and II.B.3.f.3 requires the Huntington Plant submit Compliance Reports according to the requirements of 40 CFR §63.10031(b). This submittal covers the period from July 1, 2016 to December 31, 2016 and is intended to satisfy those requirements.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information, or omitting statements and information, including the possibility of fine or imprisonment.

Should you have any questions regarding this information, please contact Richard Neilson, Huntington Power Plant Environmental Engineer at (435) 687-4334 or me at (435) 687-4211.

Sincerely.

Darrell Cunningham

Managing Director Huntington Plant

Responsible Official

Enclosures: Mercury and Air Toxics Semiannual Compliance Report with attachments A thru C - Unit 1

Mercury and Air Toxics Semiannual Compliance Report with attachments A thru C - Unit 2

Mercury and Air Toxics Semi-Annual Compliance Report Huntington Power Plant Unit 2 Reporting Period July 1, 2016 to December 31, 2016

§63.100031(c)

The compliance report must contain the information required in paragraphs (c)(1) through (5) of this section.

§63.10031(c)(1)

The information required by the summary report located in 63.10(e)(3)(vi).

I. See Attachment A Summary Report—Gaseous Excess Emission and Continuous Monitoring System Performance

§63.10031(c)(2)

The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.

Month	#2 Fuel Oil Burned (gallons)	Bituminous Coal Burned (tons)		
July	1,941	128,107.1		
August	10,907	118,193.0		
September	18,718	119,208.8		
October	844	132,966.8		
November	938	109,205.6		
December	1,220	122,970.1		
Total	34,567	730,651.6		

Note: Fuel Oil burned is a product of refineries and the coal burned is a product of coal mines therefore all fuel burned was not a waste product.

§63.10031(c)(3)

Indicate whether you burned new types of fuel during the reporting period. If you did burn new types of fuel you must include the date of the performance test where that fuel was in use.

I. No new types of fuel were burned during the reporting period.

§63.10031(c)(4)

Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in § 63.10021(e)(6) and (7) were completed

I. The most recent boiler tune up was completed on December 18, 2015 with the burner inspection occurring as part of the tune up.

§63.10031(c)(5)

Should you choose to rely on paragragh (2) of the definition of "startup" in §63.10042 for your EGU, for each instance of startup or shutdown you shall:

I. The Unit relies on paragraph (1) of the definition of "startup." Therefore, no startups or shutdowns in the current semi-annual reporting period are subject to this requirement.

§63.10031(d)

For each excess emissions occurring at an affected source where you are using a CMS to comply with that emission limit or operating limit, you must include the information required in §63.10(e)(3)(v) in the compliance report specified in section (c).

§63.10(e)(3)(v)

All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of this section, in §63.8(c)(7) and §63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

§63.10(c)(5)

The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

 CEMS monitor unavailability can be found in Attachment B CEMS Monitor Outage Report.

§63.10(c)(6)

The date and time identifying each period during which the CMS was out of control, as defined in §63.8(c)(7);

I. CEMS out of control periods can be found in Attachment B CEMS Monitor Outage Report.

§63.10(c)(7)

The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;

I. Excess emissions and monitor exceedances that occurred during startups, shutdowns, and malfunctions can be found in Attachment C Excess Emissions Report.

$\S63.10(c)(8)$

The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;

I. Excess emissions and monitor exceedances that occurred during period other than startups, shutdowns, and malfunctions can be found in Attachment C Excess Emissions Report.

§63.10(c)(10)

The nature and cause of any malfunction (if known);

I. Malfunctions nature and causes can be found in the Attachment C Excess Emission Report.

§63.10(c)(11)

The corrective action taken or preventive measures adopted;

 The corrective actions taken or preventive measures adopted as a result of malfunctions can be found in Attachment C Excess Emission Report.

§63.10(c)(12)

The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

I. The nature of repairs or adjustments to CMS is found in Attachment B CEMS Monitor Outage Report.

§63.10(c)(13)

The total process operating time during the reporting period;

I. Total process operating time during reporting period can be found in section (H) of Attachment A Summary Report—Gaseous Excess Emission and Continuous Monitoring System Performance.

§63.10031(e)

Each affected source that has obtained a Title V operating permit pursuant to part 70 or part 71 of this chapter must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 8 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

- I. Any Deviations to emissions limits are identified in Attachment C Excess Emission Report
- II. There are no operating limits associated with compliance to the Mercury and Air Toxics Standards for this Unit.
- III. There were no deviations related to the Work Practice Standard related to Boiler Tune Up requirements.
- IV. CMS were in service during all phases of operation including startup according to the required Work Practice Standard except for periods identified in Attachment B CEMS Monitor Outage Report.

V. Clean fuel was burned during each startup as required by the Work Practice Standard.

§63.10031(g)

If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.

I. Malfunctions during the reporting period are identified in Attachment C Excess Emissions Report

Attachment A

Summary Report—Gaseous Excess Emission and Continuous Monitoring System Performance

§63.10(e)(3)(vi) Summary Report

- (A) The company name and address of the affected source;
 - I. Huntington Power Plant, 6 miles west of Huntington Utah on Hwy 31
 P.O. Box 680
 Huntington, Utah 84528
- (B) An identification of each hazardous air pollutant monitored at the affected source;
 - I. Non-Mercury HAPS metal using a quarterly Filterable particulate matter (PM) stack test as a surrogate to demonstrate compliance
 - II. Acid Gases using Sulfur dioxide (SO₂) as a surrogate to demonstrate compliance by an SO₂ continuous emission monitor system (CEMS)
 - III. Mercury (Hg), compliance demonstrated by continuous emission monitor system (CEMS) until 4:00 on August 4, 2016, at which time the Unit qualified as a Low Emitting Electrical Generating (LEE) unit. An annual EPA Method 30B test is used for compliance purposes after August 4, 2016.
- (C) The beginning and ending dates of the reporting period;
 - I. This report covers the reporting period from July 1, 2016 to December 31, 2016.
- (D) A brief description of the process units;
 - I. Unit 2 is an Electric Utility Steam Generating Unit, designed as a bottom tangentially-fired boiler, designed by Babcock & Wilcox.
 - II. Rated Heat Input Capacity (mmBtu/hr) of 4,960 MMBtu/hr.
 - III. The unit is equipped with the following add-on controls
 - a. Pulse Jet Fabric Filter (baghouse)
 - b. Wet Flue Gas Desulfurization (wet scrubber)
 - c. LowNOx burner technology, w/Separated overfire air
 - IV. Fuels used are bituminous coal and #2 fuel oil for startup fuel when needed.
- (E) The emission and operating parameter limitations specified in the relevant standard(s);
 - I. Taken from Table 2 to Subpart UUUUU of Part 63 Emission Limits
 - Unit 2 is an existing unit in the coal-fired not low rank virgin coal subcategory demonstrating compliance with the following emission limits:

- i. Filterable particulate matter (PM) quarterly stack testing demonstrating compliance with 3.0E-2 lb/MMBtu (0.030 lb/MMBtu) emission limit.
- ii. Sulfur dioxide (SO₂) continuous emission monitor system (CEMS) reporting hourly averages in units of lb/mmBtu, as a surrogate for acid gases demonstrating compliance with a 30 boiler operating day average of 2.0E-1 lb./MMBtu (0.20 lb./mmBtu).
- iii. Mercury (Hg) continuous emission monitor system (CEMS) reporting hourly averages in units of lb/Tbtu demonstrating compliance with a 30 boiler operating day average of 1.2E0 lb./TBtu (1.2 lb./TBtu).
- (F) The monitoring equipment manufacturer(s) and model number(s);

Pollutant	Manufacturer	Model Number
Sulfur Dioxide (SO ₂)	Thermo	43i
Mercury (Hg)	Thermo	80i
Carbon Dioxide (CO ₂)	Thermo	410i

Note: CO2 analyzer used as a diluent monitor for calculating Heat Input Based Emission Limits

(G) The date of the latest CMS certification or audit;

CEMS Analyzer	Latest RATA Date	Latest Linearity Date
Sulfur Dioxide (SO ₂)	5/11/2016	11/29/2016
Mercury (Hg)	5/11/2016	7/13/2016
Carbon Dioxide (CO ₂)	5/11/2016	11/29/2016

Note: The SO2 and CO₂ analyzers were certified for reporting under the Acid Rain Program prior to the initial compliance date of April 16, 2015. The Hg analyzer initial certification was on May 13, 2014.

(H) The total operating time of the affected source during the reporting period;

Operating Period	Hours of Unit Operation
7/1/2016 to 9/30/2016 3rd Quarter	2098.2
10/1/2016 to 12/31/2016 4th Quarter	2208
Total Operating time from 7/1/2016 to 12/31/2016	4306.2

(I) An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

Excess Emissions Summary	PM	SO ₂	Hg
Total Hours of Exceedance	0	0	0
Exceedance percent of total operating hours	0.0	0.0	0.0
Hours during startup and shutdown	0	0	0
Hours during control equipment problems	0	0	0
Hours during process hours	0	0	0
Hours during other know problems	0	0	0
Hours during unknown causes	0	0	0
Emission Limit	0.030	0.20	1.2
Emission Limitation Unit	lb/MMBtu	lb/MMBtu	Lb/TBtu
Emission limitation averaging period	Quarterly Stack Testing	30 boiler operating day	30 boiler operating day

(J) A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

CMS Performance Summary	SO ₂	Hg*
*Downtime percent of total operating hours	0.09	6.06
Total hour of CMS downtime	4	50
Hours due to monitoring equipment malfunctions	0	9
Hours due to non-monitoring equipment malfunctions	0	0
Hours due to quality assurance/quality control calibrations	0	41
Hours due to other known causes	4	0
Hours due to other unknown causes	0	0

(K) A description of any changes in CMS, processes, or controls since the last reporting period;

*Unit 2 qualified as a Mercury Low Emitting Electrical Generating (LEE) unit effective 9:00 on August 4, 2016. On/after 9:00 August 4, 2016 use of the related Mercury CEMS was discontinued. Mercury Downtime percent of total operating hours is based upon 824.92 hours of operation while the Mercury CEMS was in service.

(L) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
Darrell J Cunningham Responsible Official Managing Director – Huntington Power Plant
(M) The date of the report.

Attachment B

CEMS Monitor Outage Report

Sulfur Dioxide (SO₂) System Monitor Outage (lb/MMBtu)

Monitor Outage Incident Number	Date	Time Beginning	Time Ending	Hours Involved	Out of Control (Y/N)	Cause*	Corrective *Action
1	9/23/2016	06:00	06:59	1	Y	724	q
2	9/24/2016	12:00	14:59	3	Y	724	q

Total duration of monitor downtime ___4__ hours

Description of Causes/Corrective Actions.

*Cause: 724	Hours due to other known causes		
*Corrective Action: q	Daily Calibration was not completed within 24 hours of last calibration as per Part 60. Monitor was calibrated and resumed normal service.		

Mercury (Hg) System Monitor Outage (lb/TBtu)

Monitor Outage Incident Number	Date	Time Beginning	Time Ending	Hours Involved	Out of Control (Y/N)	Cause*	Corrective* Action
1	7/05/2016	08:00	16:59	9	Y	721	dd
2	7/12/2016	08:00	19:59	12	N	723	kk
3	7/13/2016	07:00	07:59	1	N	723	d
4	7/19/2016	08:00	11:59	4	N	723	kk
5	7/26/2016	08:00	18:59	11	N	723	kk
6	8/02/2016	08:00	20:59	13	N	723	kk

Total duration of monitor downtime ____50__ hours

See below for description of Causes/Corrective Actions.

Description of Causes/Corrective Actions.

*Cause: 721	Hours due to monitoring equipment malfunctions
*Corrective Action: dd	The mercury monitor failed the weekly integrity test. Adjustments were made. The test was rerun and passed.
*Cause: 723	Hours due to quality assurance/quality control calibrations
*Corrective Action: d	Setting gas pressures and flow rates for daily cal or linearity test, then auto cal to verify accuracy or quarterly linearity testing performed. (Setting up for linearity test.)
kk	Weekly integrity and/or monthly oxidizer tests on the mercury CEMS.

Attachment C

Excess Emissions Report

PM Excess Emissions

0.030 lb/MMBtu (Quarterly Stack Testing)

Excess Emission Incident Number	Magnitude of Excess Emissions lb/MMBtu	Date	Time Beginning	Time Ending	Hours Involved	Malfunction Y/N	Cause	Corrective Action

Total time for all excess emissions 0.0 hours

Total time for excess emissions occurring during startup/shutdown or malfunction <u>0.0</u> hours

Malfunction reason and corrective /preventive action taken)

No PM Excess Emissions occurred during the reporting period No PM Malfunction occurred during the reporting period

SO₂ Excess Emissions

0.20 lb/MMBtu (30 Boiler Operating Day Average)

Excess Emission Incident Number	Magnitude of Excess Emissions lb/MMBtu	Date	Time Beginning	Time Ending	Hours Involved	Malfunction Y/N	Cause	Corrective Action

Total time for all excess emissions <u>0.0</u> hours

Total time for excess emissions occurring during startup/shutdown or malfunction <u>0.0</u> hours

Malfunction reason and corrective /preventive action taken)

No SO₂ Excess Emissions occurred during the reporting period

No SO₂ Malfunction occurred during the reporting period

Hg Excess Emissions

1.2 lb/TBtu (30 Boiler Operating Day Average)

Excess Emission Incident Number	Magnitude of Excess Emissions lb/MMBtu	Date	Time Beginning	Time Ending	Hours Involved	Malfunction Y/N	Cause	Corrective Action
		100						

Total time for all excess emissions <u>0.0</u> hours

Total time for excess emissions occurring during startup/shutdown or malfunction <u>0.0</u> hours

Malfunction reason and corrective /preventive action taken)

No Hg Excess Emissions occurred during the reporting period No Hg Malfunction occurred during the reporting period